

Message

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**From:** Krebs, Ken [krebs.ken@epa.gov]  
**Sent:** 4/8/2020 5:28:45 PM  
**To:** Bill Preston [BPreston@css-inc.com]; Ryan, Jeff [Ryan.Jeff@epa.gov]  
**CC:** Nessley, Libby [Nessley.Libby@epa.gov]; Preston, Bill [Preston.Bill@epa.gov]; George, Ingrid [George.Ingrid@epa.gov]; Singer, Carl [Singer.Carl@epa.gov]  
**Subject:** RE: NY SUMMA Data  
**Attachments:** NYSDEC Report - Final 12-2-19.ppb sans AC.docx; NYSDEC Report - Final 12-2-19.ppb sans AC.docx - Shortcut.lnk

Hi All,

Here are the tables with ppb instead of area counts. I attached the file as well as storing it in:

**Ex. 6 Personal Privacy (PP)**

Be Safe  
Ken

Ken Krebs  
Chemist  
U.S. Environmental Protection Agency  
Center for Environmental Measurement & Modeling  
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"There is but one kind of unity possible in a world as diverse as ours. It is unity of method, rather than aim; the unity of disciplined experiment."  
Walter Lippmann

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**From:** Bill Preston <BPreston@css-inc.com>  
**Sent:** 08 April, 2020 12:32  
**To:** Ryan, Jeff <Ryan.Jeff@epa.gov>; Krebs, Ken <krebs.ken@epa.gov>  
**Cc:** Nessley, Libby <Nessley.Libby@epa.gov>; Preston, Bill <Preston.Bill@epa.gov>; George, Ingrid <George.Ingrid@epa.gov>; Singer, Carl <Singer.Carl@epa.gov>  
**Subject:** Re: NY SUMMA Data

Okay, I won't worry about it. There is also 3 other targets that we reported as well for them. We have added 4/2 and 6/2 fluorotelomer alcohols since then to our normal listing.

Thanks Jeff!

**Bill Preston**  
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**From:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Sent:** Wednesday, April 8, 2020 12:15 PM  
**To:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>; Krebs, Ken <[krebs.ken@epa.gov](mailto:krebs.ken@epa.gov)>  
**Cc:** Nessley, Libby <[Nessley.Libby@epa.gov](mailto:Nessley.Libby@epa.gov)>; Bill Preston (EPA) <[preston.bill@epa.gov](mailto:preston.bill@epa.gov)>; George, Ingrid <[George.Ingrid@epa.gov](mailto:George.Ingrid@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Subject:** RE: NY SUMMA Data

No need at all to redo Bill. Just want to be able to follow the path of calcs. The State of NY and Region 2 requested these data and we want to just make sure what we do is accurate. Thanks for all your help.

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**From:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>  
**Sent:** Wednesday, April 08, 2020 12:05 PM  
**To:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>; Krebs, Ken <[krebs.ken@epa.gov](mailto:krebs.ken@epa.gov)>  
**Cc:** Nessley, Libby <[Nessley.Libby@epa.gov](mailto:Nessley.Libby@epa.gov)>; Preston, Bill <[Preston.Bill@epa.gov](mailto:Preston.Bill@epa.gov)>; George, Ingrid <[George.Ingrid@epa.gov](mailto:George.Ingrid@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Subject:** Re: NY SUMMA Data

Hi Jeff,

This TFE data was fit using a linear regression that wasn't forced. Recent work has been done using a force quadratic fit that might be slightly better for values at the low end. I can redo these using a quad fit if you want me to. Please just let me know and please keep me in the loop.

Best,  
Bill

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**From:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Sent:** Wednesday, April 8, 2020 11:13 AM  
**To:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>; Krebs, Ken <[krebs.ken@epa.gov](mailto:krebs.ken@epa.gov)>  
**Cc:** Nessley, Libby <[Nessley.Libby@epa.gov](mailto:Nessley.Libby@epa.gov)>; Bill Preston (EPA) <[preston.bill@epa.gov](mailto:preston.bill@epa.gov)>; George, Ingrid

<[George.Ingrid@epa.gov](mailto:George.Ingrid@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>

**Subject:** RE: NY SUMMA Data

Awesome Bill – Thanks. I would like to include you to look over our data tables just to confirm we got it right.

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**From:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>

**Sent:** Wednesday, April 08, 2020 11:07 AM

**To:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>; Krebs, Ken <[krebs.ken@epa.gov](mailto:krebs.ken@epa.gov)>

**Cc:** Nessley, Libby <[Nessley.Libby@epa.gov](mailto:Nessley.Libby@epa.gov)>; Preston, Bill <[Preston.Bill@epa.gov](mailto:Preston.Bill@epa.gov)>; George, Ingrid <[George.Ingrid@epa.gov](mailto:George.Ingrid@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>

**Subject:** Re: NY SUMMA Data

Hi Jeff/All,

The TFE sample data can be found in the main PFAS calculated spreadsheet. Page down to row 44 (green shading) and you will see them. The cells are linked so that you can follow that it took the Q-edited (all data integrations are double-checked/modified, if necessary) and quantified peak via the Agilent software and multiplied that by the dilution factor. There were a few that were calculated using a single-point daily calibration due to internal standard being problematic (as I recall) during that small window (yellow shading/page up).

All of the sample canisters were cleaned and analyzed prior to field deployment. These values can be viewed on row 55. All were non-detect. These are shaded in blue and are spaced directly under the corresponding samples (green shading) above it.

Mid-level TFE, HFP, E1 and E2 were all prepared individually in a Summa canister and differing amounts were analyzed on the 7890 GC/Marke TOF. Off the top of my head we analyzed 10, 25, 50, 100 and 150 cc of a singular mid-level canister to form a TFE calibration between 0.8 ppb-12.29 ppb/(dropped 8 ppb level for TFE). The calibration correlation coefficient was 0.9955 for TFE for this particular quantification method (Marke PFAS light composite March 26, 2019-all 4 reported targets greater than 0.995). And, the data was fit with a linear regression at that time. I can get more specifics later and perhaps validate what I can remotely.

We did not have MDL's at this time for this method. That is something that we are working on right now and will have some very soon.

Recent work has validated the standard preparation process as being pretty reliable, albeit tricky. Getting a commercially prepared standard would be useful (Dan Riemer could possibly do this for us as we move forward).

Hope this helps,  
Bill

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**From:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Sent:** Wednesday, April 8, 2020 7:56 AM  
**To:** Krebs, Ken <[krebs.ken@epa.gov](mailto:krebs.ken@epa.gov)>  
**Cc:** Nessley, Libby <[Nessley.Libby@epa.gov](mailto:Nessley.Libby@epa.gov)>; Bill Preston (EPA) <[preston.bill@epa.gov](mailto:preston.bill@epa.gov)>; Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>; George, Ingrid <[George.Ingrid@epa.gov](mailto:George.Ingrid@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Subject:** NY SUMMA Data

Ken,

Sorry – I said I would get you this sooner Ex. 6 Personal Privacy (PP)

For all involved, we've been asked to report the SUMMA "estimated" concentration results

I've been poking around the data spreadsheet to refresh my memory of all we did with the reporting.

What we reported originally were the raw area counts normalized (multiplied by) for can dilution ratios. Now we just need to report the absolute concentrations, inclusive of dilutions as well.

Those results are in the attached spreadsheet. The TFE results are primarily what NY wants. If I read Bill's data correctly, they are all in the ppt range (see Main PFAS Calculations tab). I didn't see in that tab the actual calculations getting from area counts to concentration. This is a comprehensive spreadsheet, so I'm sure they're somewhere else and I didn't have the energy to go digging. I've included Bill Preston in the message so that if we do have questions, he'll know what we're working from.

I'd like to follow the same reporting format as in our report. I suggest combining the TO-15 results with the TFE, putting the TFE 1<sup>st</sup> (on top) and separate by a border or row or 2.

We'll need to include Libby in the conversation. Pretty sure she's already done an audit on this, but we all need to be able to recreate Bill's calcs and confirm what we have.

Bill sent me some time ago a description of how he did the TFE analyses – mainly the calibrations as to how they differ from TO-15. I'll forward that when I find it.

Ingrid – I'm just keeping you in the loop.

Ken – hopefully this is enough for you to go on. FYI – this is the same spreadsheet that's in the L: drive. I also saved it to my one-drive and can share with you all that way. I suggest just saving this spreadsheet as a new file and going from there.

Jeff

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*"And all this science, I don't understand."  
"It's just my job 5 days a week"*

Elton John - Rocket Man

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